

Application number 09/662,068 Amendment dated March 8, 2004 Reply to office action mailed October 6, 2003 PATENT

REMARKS/ARGUMENTS

After entry of this amendment claims 53-54 and 56-70 will remain pending in this application. Claims 53, 56, 62, 64, 68, and 69 have been amended. Support for the amended claims can be found in the specification, no new matter has been added.

Claims 53-54 and 56-70 are subject to an obviousness-type double patenting rejection as being unpatentable over Talbot et al., United States patent number 6,272,600. Claim 53 stands rejected under 35 U.S.C. § 102 (e) as being anticipated by Wang et al, United States patent number 5,642,494 (Wang). Claims 56, 59-64, and 66 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over Wang. Reconsideration of the 102 and 103 rejections and an abeyance of the double-patenting rejection is respectfully requested.

Double patenting rejection

Claims 53-54 and 56-70 are subject to an obviousness-type double-patenting rejection. Applicants respectfully request that this rejection be held in abeyance until there is an indication of allowable claims.

Claim 53

Claim 53 stands rejected under 35 U.S.C. § 102 (e) as being anticipated by Wang. But Wang does not teach each and every element of this claim. For example, claim 53 as amended recites "ordering the plurality of memory access requests, wherein the plurality of memory requests are ordered based on the availability of corresponding memory locations and their ages," Wang does not provide this feature.

Wang provides a cache memory system wherein when a memory request is blocked only if the request misses the cache memory and also conflicts with a request already being serviced. (See Wang, abstract.)

This is a different ordering criteria than that required by the claim. Specifically, the claimed method orders requests based on availability and age of the requests. This provides a ordering of requests that reduces their average wait time, as described in the pending

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specification. Wang does not provide this feature. Rather, Wang simply blocks request to an unavailable memory location unless if it also conflicts with a request already being service.

For at least this reason, claim 53 should be allowed.

Claim 64

Claim 64 stands rejected under 35 U.S.C. § 103 as being unpatentable over Wang. But Wang does not show or suggest each and every element of this claim. For example, claim 64 as amended recites "an ordering module for determining said execution order from said receiving order, said execution order is based on availability of target memory addresses associated with said plurality of memory access requests as well as an initial priority of the request, the initial priority determined by identities of memory access request sources." Wang does not provide this feature.

Again, Wang provides a cache memory system wherein when a memory request is blocked only if the request misses the cache memory and also conflicts with a request already being serviced. (See Wang, abstract.)

This is a different ordering criteria than that required by the claim. Specifically, the claimed queue orders requests based on availability and an initial priority of the requests. This provides a ordering of requests that reduces their average wait time and provides a higher priority to some circuits, such as a processor, as described in the pending specification. Wang does not provide this feature. Rather, Wang simply blocks request to an unavailable memory location unless if it also conflicts with a request already being service.

For at least this reason, claim 64 should be allowed.

Other claims

Claims 56, 62, 68, and 69 should be allowed for similar reasons as claims 53 and 64. The other claims depend on these claims, and should be allowed for similar reasons and for the additional limitations they recite.

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CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this application are in condition for allowance. The issuance of a formal notice of allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-752-2456.

Respectfully submitted

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